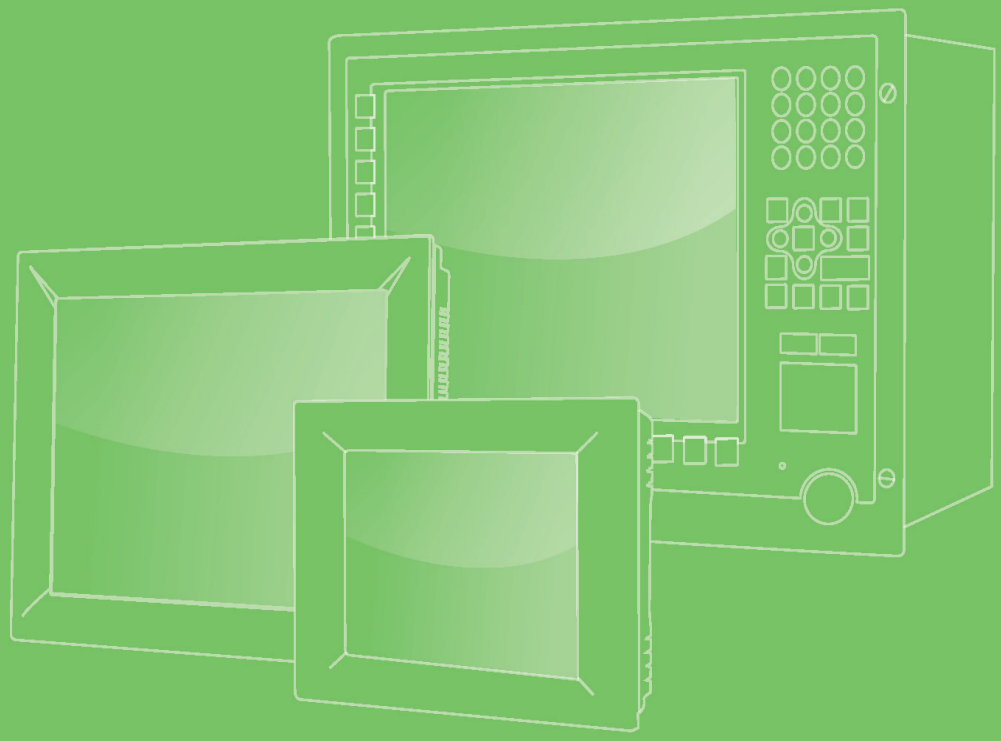

User Manual

PWS-8101M

10.4" XGA TFT LCD Intel Core 2 Duo Ultra Rugged Mobile Computer with Wi-Fi

ADVANTECH
eAutomation

Copyright

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Product Warranty (2 years)

Advantech warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Advantech, or which have been subject to misuse, abuse, accident or improper installation. Advantech assumes no liability under the terms of this warranty as a consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
3. If your product is diagnosed as defective, obtain an RMA (return merchandize authorization) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Part No.2003810100 Edition 1

Printed in Taiwan April 2009

Declaration of Conformity

CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from Advantech. Please contact your local supplier for ordering information.

FCC Class B

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Technical Support and Assistance

1. Visit the Advantech web site at www.advantech.com/support where you can find the latest information about the product.
2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:
   - Product name and serial number
   - Description of your peripheral attachments
   - Description of your software (operating system, version, application software, etc.)
   - A complete description of the problem
   - The exact wording of any error messages

Warnings, Cautions and Notes

Follow these simple precautions to protect yourself from harm and the products from damage.

- To avoid electrical shock, always disconnect the power from your PC chassis before you work on it. Don't touch any components on the CPU card or other cards while the PC is on.

Disconnect power before making any configuration changes. The sudden rush of power as you connect a jumper or install a card may damage sensitive electronic components.

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If one of the following situations arises, get the equipment checked by service personnel:
15. The power cord or plug is damaged.
16. Liquid has penetrated into the equipment.
17. The equipment has been exposed to moisture.
18. The equipment does not work well, or you cannot get it to work according to the user's manual.
19. The equipment has been dropped and damaged.
20. The equipment has obvious signs of breakage.
21. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY GO BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.
22. CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER, DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
23. The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).

DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

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Chapter 1

General Information

1.1 Introduction

Congratulations on your purchase of the PWS-8101M Rugged Tablet PC. This product combines rugged design with reliable performance and powerful functionality to best suit all your needs, in a wide range of working conditions.

This user manual outlines all you need to know to set up and use your PWS-8101M. If you have any further questions or queries, contact our technical support team.

1.1.1 Features

- Rugged design, up to military standard (MIL-STD-810F)
- Efficient Core 2 Duo processor
- Durable, shock-resistant magnesium alloy housing
- Built-in WLAN/Bluetooth/GPS/GPRS functions
- IP65 compliant & built to withstand a 3 foot drop
- Intel Core 2 Duo processor
- 10.4” SVGA / XGA TFT LCD
- I/O ports for expansion

1.1.2 Package Contents

Ensure all the following items are present when you receive your PWS-8101M. If any of these items are missing, contact your vendor immediately.

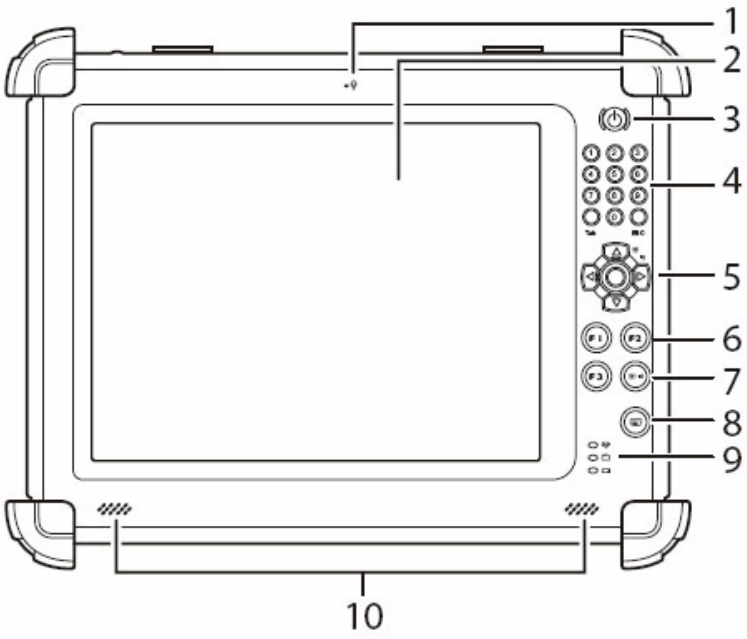
- PWS-8101M Tablet PC
- AC power adaptor
- Power cord
- Battery
- Stylus
- CD
- Manual

1.1.3 Optional Accessories

- Hand Strap and Shoulder Strap
- Vehicle Dock
- Vehicle Mount Enclosure
- Vesa Bracket
- Battery Pack
- Stylus (3 pcs in one pack)

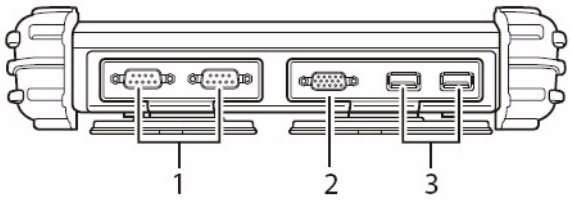
1.2 Exploring the PWS-8101M

1.2.1 Front View



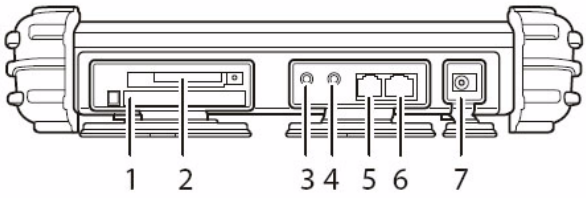
No.	Component
1	Microphone
2	Touch-sensitive display (responds to stylus or finger)
3	Power button
4	Number / Tab / Esc buttons
5	4-Way navigation button with integrated enter button
6	Function buttons
7	Brightness / volume button
8	Keyboard button
9	Status LEDs: Battery charge LED: **Off**: power off **Solid Green**: green lights on when charging in power off mode, lights off when finish charging. **Blinking Green**: AC power on & battery is charging in power on mode. **Solid Yellow**: power on, battery low **Blinking Yellow**: power on, battery critical low HDD activity LED: **Green** when HDD is accessed WLAN connection status LED: **Off**: No RF signal / No LAN connection **Solid Green**: WLAN Activated **Blinking green**: TX/RX Transmission
10	Speakers

1.2.2 Right View

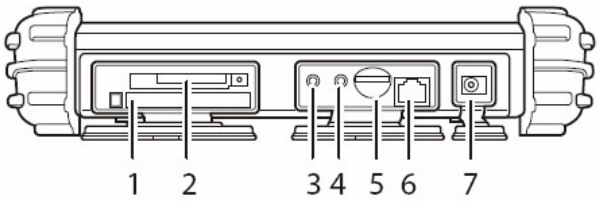


No.	Component
1	Serial ports
2	VGA port
3	USB ports

1.2.3 Left View with Telephone Jack

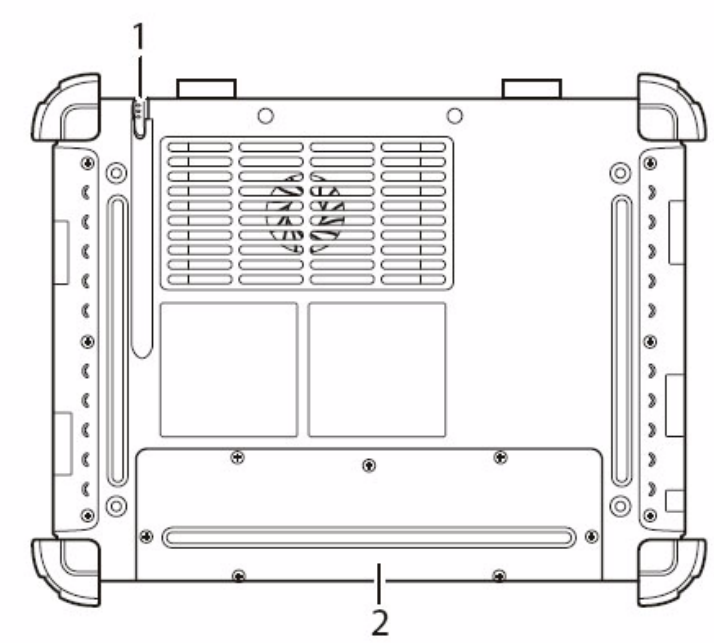


1.2.4 Left View with 3G SIM Card Slot (optional)



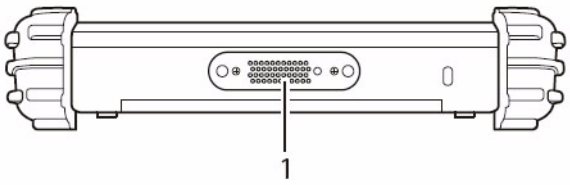
No.	Component
1	PC card slot (PCMCIA)
2	CompactFlash card slot
3	Headphone jack
4	Microphone jack
5	Telephone line jack/3G SIM card slot (optional)
6	RJ45 jack (for network cables)
7	DC-in jack

1.2.5 Rear View



No.	Component
1	Stylus
2	Battery compartment cover

1.2.6 Bottom View



No.	Component
1	Docking connector

1.3 Specifications

Feature	Description
Operating System	Windows XP Embedded/ Windows XP Professional Embedded Windows Vista Embedded
Processor	Core 2 Duo U7500
Chipset	GME965 & ICH8M
Memory	One SO-DIMM DDRI 533 support up to 2GB
Storage	CompactFlash (2GB CF Memory card) or 2.5” HDD 80G SATA
Display	10.4” SVGA/XGA Transmissive LCD, optional sunlight readable LCM
Touch Panel	4-wire resistive touch panel
Application Button	One Power button and one software keyboard button 12 numeric keys (0~9, #, *) 4-Way navigation button with integrated enter button Four Function programmable buttons for quick selection of applica-tions
Communication	802.11a/b/g WLAN (miniPCI) module (optional) Bluetooth class 2, v2.0+EDR (optional) Modem or Internal GPRS HSDPA (optional) GPS module built-in with integral antenna
Audio System	Realtek ALC260

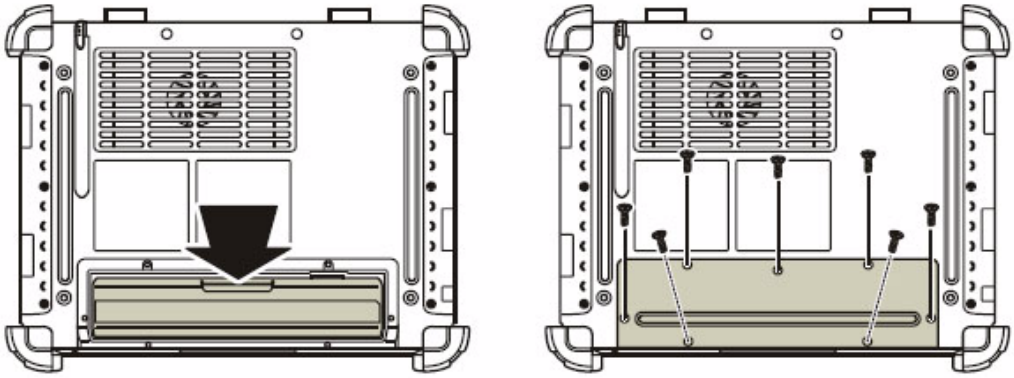
Feature	Description
LED Status Indicators	Power LED: Off: Power off Solid green: Lit when charging in power off mode, off when charging is complete Blinking green: Power on, battery is charging in power on mode Solid yellow: Power on, battery low Blinking yellow: Power on, battery criti-cally low HDD LED: Green when HDD is being accessed WLAN LED: Off: No RF signal / No LAN connection Solid Green: WLAN activated Blinking Green: TX/RX transmission
I/O Ports	Two USB 2.0 host connector Two RS-232/422/485 (optional) One VGA output One CF Type II slot One PCMCIA Type II slot, support CardBus 2.1 One internal mono microphone One internal stereo speaker One RJ45 for 10/100/1000Mbps Ethernet One RJ11 for 56kbps v.92/k56 fax modem Or SIM Card Slot (optional) One stereo headphone jack One microphone jack One DC-In jack One docking connector
Main Battery	Rechargeable Li-ion smart battery, 11.1V, 5200mAh, 3S2P
Power Adapter	Universal AC 100V~240V, 50~60Hz input; 19V, 3.16A output, 60W
Physical	310 x 236 x 42mm, approx. 2.9Kg

Feature	Description
Environment	Operating Temperature: -20ºC to 60ºC Storage Temperature -40ºC to 70ºC Operating Humidity 5% ~ 95%
Rugged Rating	IP65, 3ft drop, MIL-STD-810F, MIL-STD-461E
Certification	CE, FCC, VCCI, C-tick, WEEE, CCC
Optional Accessories	AC adaptor and Power cord Hand Strap & Shoulder bag DC-DC Adaptor (Input 12VDC~32VDC Vehicle Adaptor) Vehicle Mount VESA Mount Vehicle Docking External Battery Charger

1.4 Getting Started

1.4.1 Inserting and Removing the Battery

Insert the battery and secure the battery compartment door with the screws provided.



Note! *The arrow markings on the battery indicate the direction in which it should be inserted.*

Repeat the above steps in reverse to remove the battery.

1.4.2 Connecting the Power

Before you can use your PWS-8101M, you must fully charge the battery. Connect the power adapter and leave to charge for a minimum of 4 hours before use.

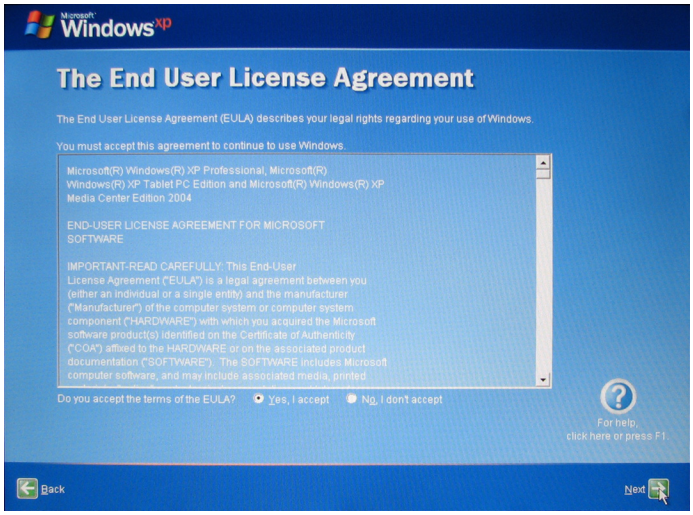
1.4.3 Setup with Windows XP Professional Embedded

When you first turn on the PWS-8101M, the following setup screens will appear. Follow these instructions to validate your version of Windows XP and set up your system correctly.

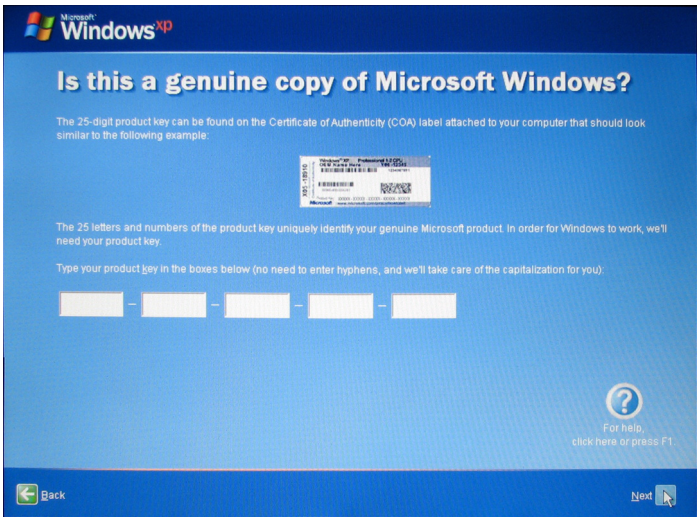
1. The Welcome screen appears. Tap **Next** to continue.

Windows xp
Welcome to Microsoft Windows
Thank you for purchasing this computer featuring Microsoft Windows XP.
Let's spend a few minutes setting up your computer.
To continue, click Next.
For help, click here or press F1.
Next

2. Tap **Yes, I accept** to agree to the terms and conditions. Tap **Next** to continue.


Windows xp
The End User License Agreement
The End User License Agreement (EULA) describes your legal rights regarding your use of Windows.
You must accept this agreement to continue to use Windows.
Microsoft(R) Windows(R) XP Professional, Microsoft(R) Windows(R) XP Tablet PC Edition and Microsoft(R) Windows(R) XP Media Center Edition 2004
END-USER LICENSE AGREEMENT FOR MICROSOFT SOFTWARE
IMPORTANT-READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and the manufacturer ("Manufacturer") of the computer system or computer system component ("HARDWARE") with which you acquired the Microsoft software product(s) identified on the Certificate of Authenticity ("COA") affixed to the HARDWARE or on the associated product documentation ("SOFTWARE"). The SOFTWARE includes Microsoft computer software, and may include associated media, printed
Do you accept the terms of the EULA? Yes, I accept No, I don't accept
For help, click here or press F1.
Back
Next

3. Enter the 25-digit product key to validate your copy of Windows. Tap **Next**.


Windows xp
Is this a genuine copy of Microsoft Windows?
The 25-digit product key can be found on the Certificate of Authenticity (COA) label attached to your computer that should look similar to the following example:
The 25 letters and numbers of the product key uniquely identify your genuine Microsoft product. In order for Windows to work, we'll need your product key.
Type your product key in the boxes below (no need to enter hyphens, and we'll take care of the capitalization for you):
For help, click here or press F1.
Back
Next

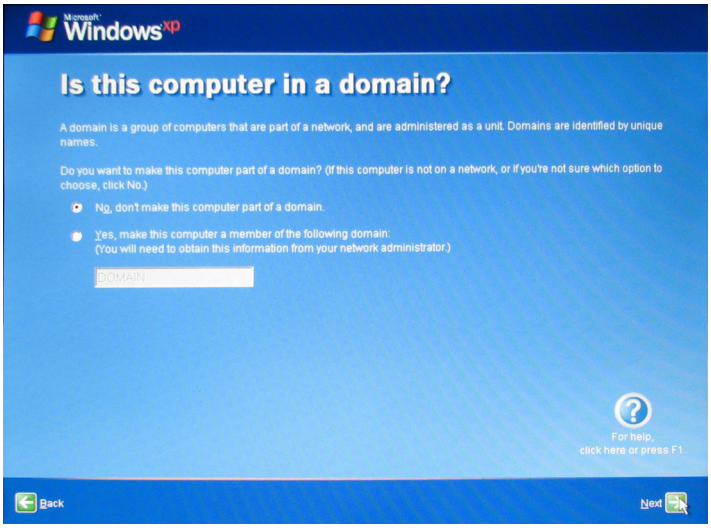
4. Enter a name to identify your PWS-8101M. This the name by which it will be recognized on all connected networks. You can also enter a description if required. Tap **Next** to continue.

Windows xp
What's your computer's name?
Choose a name for your PC that will help you identify it on your home network, if you have one. Each computer on your network must have a unique name.
You can name your computer based on its owner or location, for example "DAVID" or "FAMILYROOM." In order for your computer to appear on a network, its name cannot be longer than 15 characters or contain any spaces or characters aside from the numbers 0-9, the letters A-Z and a-z, and hyphens.
Computer name:
XT1100
You can also give your computer a friendly description. Unlike the computer name, the computer description may contain spaces and other special characters. "David's game machine" and "The Chavez Family Computer" are examples of computer descriptions.
Computer description:
(Optional)
For help, click here or press F1.
Back
Skip
Next

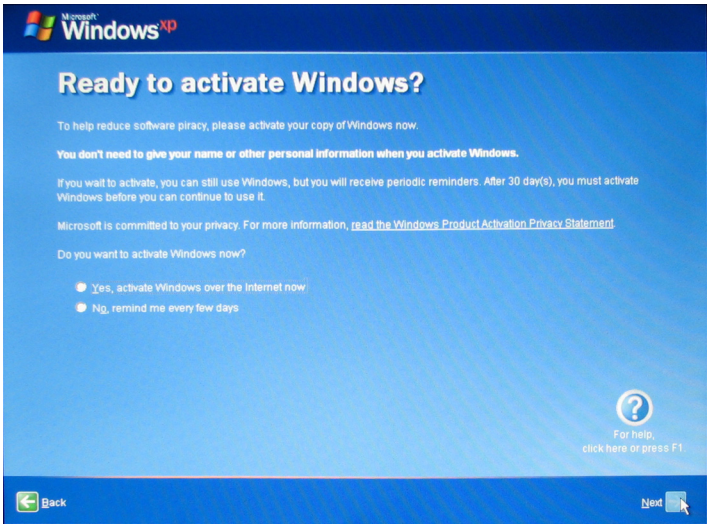
5. Enter an administrator password and re-confirm. Tap **Next** to continue.

Windows xp
What's your Administrator password?
You should set a password to protect this computer from unauthorized access. If you leave this password blank, then any user can log on as the Administrator using a blank password. When you type your password, make sure that the CAPS LOCK key is not turned on.
Administrator password:
Confirm password:
For help, click here or press F1.
Back
Skip
Next

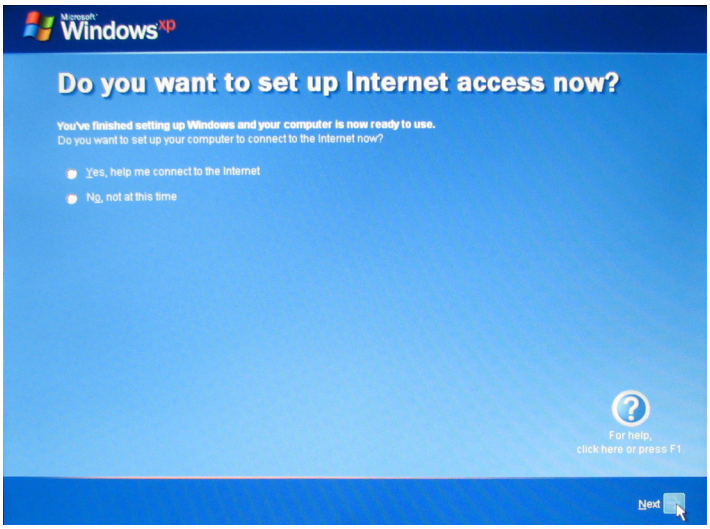
6. Choose whether or not to make the PWS-8101M part of a domain. If so, enter the domain name (ask your system administrator for details). Tap **Next** to continue.


Windows xp
Is this computer in a domain?
A domain is a group of computers that are part of a network, and are administered as a unit. Domains are identified by unique names.
Do you want to make this computer part of a domain? (If this computer is not on a network, or if you're not sure which option to choose, click No.)
No, don't make this computer part of a domain.
Yes, make this computer a member of the following domain:
(You will need to obtain this information from your network administrator.)
DOMAIN
For help, click here or press F1.
Back
Next

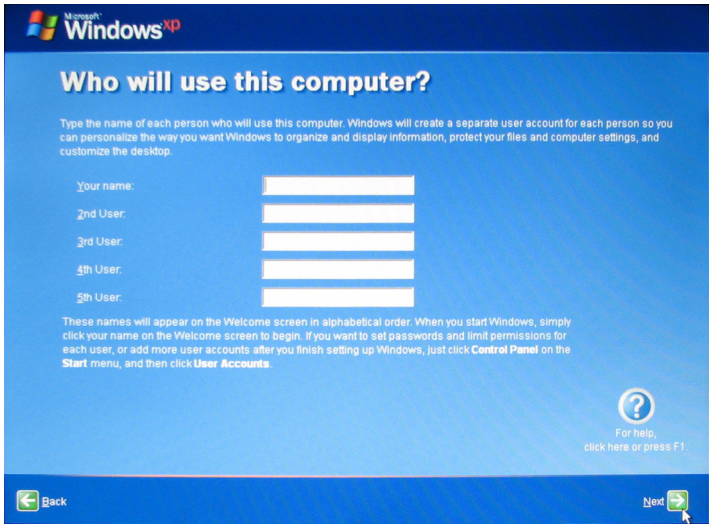
7. Choose whether or not to activate your copy of Windows immediately or at a later date (we recommend you activate the software immediately). Tap **Next** to continue.


Windows xp
Ready to activate Windows?
To help reduce software piracy, please activate your copy of Windows now.
You don't need to give your name or other personal information when you activate Windows.
If you wait to activate, you can still use Windows, but you will receive periodic reminders. After 30 day(s), you must activate Windows before you can continue to use it.
Microsoft is committed to your privacy. For more information, read the Windows Product Activation Privacy Statement.
Do you want to activate Windows now?
Yes, activate Windows over the Internet now
No, remind me every few days
For help, click here or press F1.
Back
Next

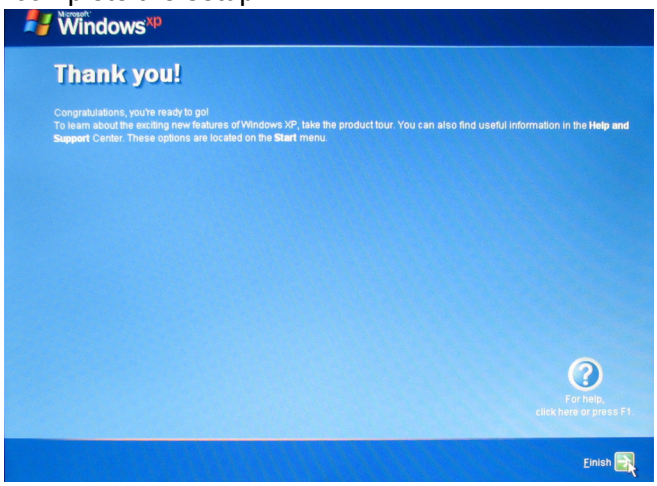
8. You can now configure your internet connection. Tap **Yes, help me connect to the Internet** to run the Internet Configuration Wizard. Tap **Next** to continue.


Windows xp
Do you want to set up Internet access now?
You've finished setting up Windows and your computer is now ready to use.
Do you want to set up your computer to connect to the Internet now?
Yes, help me connect to the Internet
No, not at this time
For help, click here or press F1.
Next

9. Enter the names of other users of your PWS-8101M. You can add up to five users. Tap **Next** to continue.


Windows xp
Who will use this computer?
Type the name of each person who will use this computer. Windows will create a separate user account for each person so you can personalize the way you want Windows to organize and display information, protect your files and computer settings, and customize the desktop.
Your name:
2nd User:
3rd User:
4th User:
5th User:
These names will appear on the Welcome screen in alphabetical order. When you start Windows, simply click your name on the Welcome screen to begin. If you want to set passwords and limit permissions for each user, or add more user accounts after you finish setting up Windows, just click Control Panel on the Start menu, and then click User Accounts.
For help, click here or press F1.
Back
Next

10. Tap **Finish** to complete the setup.


Windows xp
Thank you!
Congratulations, you're ready to go!
To learn about the exciting new features of Windows XP, take the product tour. You can also find useful information in the Help and Support Center. These options are located on the Start menu.
For help, click here or press F1.
Finish

Recovering from a System Crash in WinXP Pro Embedded

In the unlikely event the system should crash, do the following to reboot your system:

1. Press the power button to turn on the PWS-8101M. During boot- up, **PRESS UP KEY TO RUN RESTORE...** is displayed. Press the up arrow button.
2. The recovery software screen appears with the message '**Are you sure you want to recover the partition now?**'. Press **Enter** to confirm. The recovery operation starts.

Recovering from a System Crash If you are using Windows XP Embedded

If you are using the Compact Flash memory card for data storage, your PWS-8101M will follow the CF recovery procedures to re-boot your system.

Follow these steps to perform a recovery procedure using a USB flash drive should your system crash:

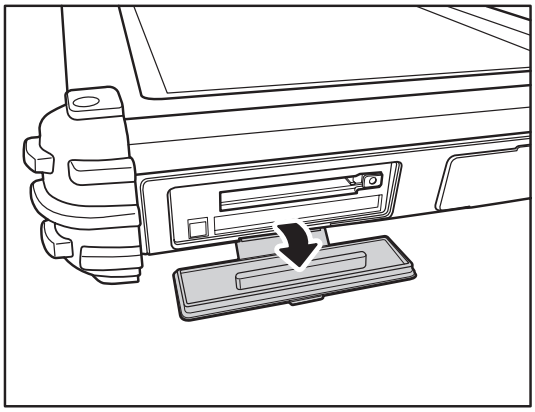
1. Download the **FORMATUPD.EXE** file to your local drive (C:\).
2. Connect a USB flash drive to your computer.
3. Click **Start** > **Run** and type **cmd** in the command box.
4. Type **cd** and press **Enter**.
5. Type **FORMATUFD F: /y**
6. Copy the files from the **Windows XPE Recovery** folder on your local drive to the USB flash drive.
7. Connect the USB flash drive and a keyboard to your PWS-8101M and turn on the computer.
8. Press the **Del** key repeatedly during boot up to enter the BIOS screen.
9. Highlight **Advanced BIOS Features** and press **Enter**.
10. Highlight **Hard Disk Boot Priority** and press **Enter**.
11. Highlight your USB flash drive from the list and press **+** to move it up until it is at the top of the list.
12. Press **F10** to exit the screen.
13. Highlight **Save & Exit Setup** and press **Enter**.
14. Press **Y** to save and exit when the confirmation message appears.
15. The system will now enter recov- ery mode. Click **OK** twice to con- tinue.
16. Once the process is complete, click **Quit**, remove the USB flash drive and the system will restart automatically.

1.4.4 Expansion Cards

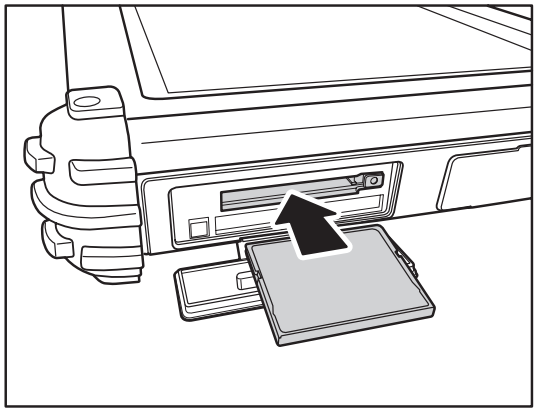
Inserting a Memory Card

You can insert a Compact Flash memory card to store data, which needs to be later transferred to another machine, or to simply expand the storage capacity of the PWS-8101M. You can use Compact Flash cards up to 2GB in size.

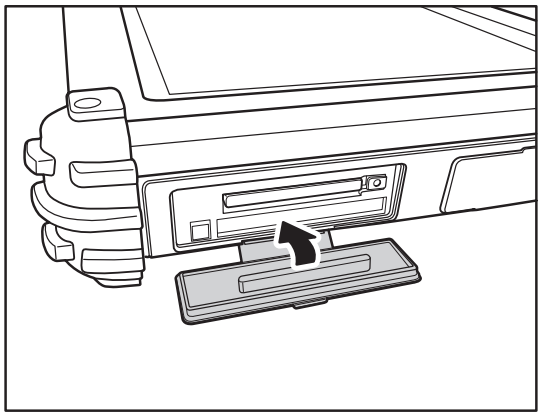
1. Open the memory card compartment cover.



2. Insert the Compact Flash card, until it clicks into place.



3. Close the memory card compartment cover.



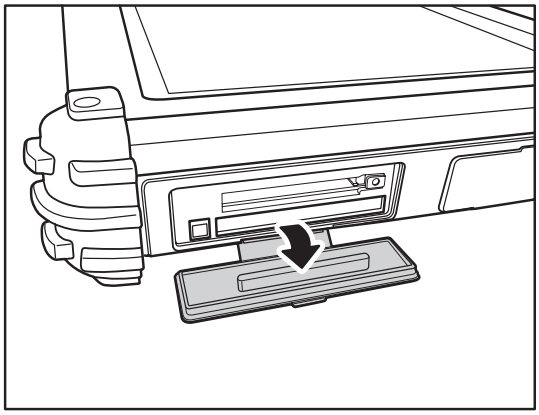
Removing a Memory Card

1. Open the memory card compartment cover.
2. Press the Compact Flash card inwards, until it clicks.
3. Release and the card will pop out.
4. Remove the card and close the memory card compartment cover.

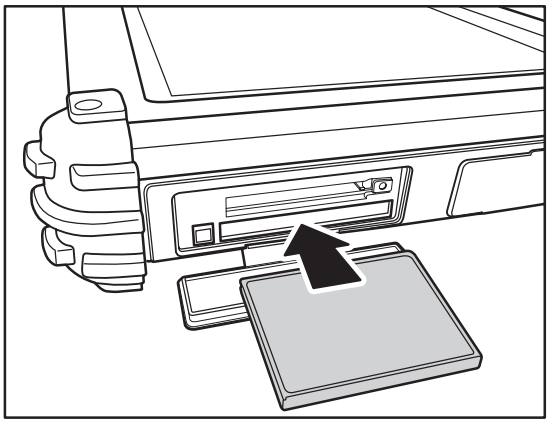
Inserting a PCMCIA Card

You can also insert a PCMCIA card to store and transfer data between computers with compatible PC card capabilities.

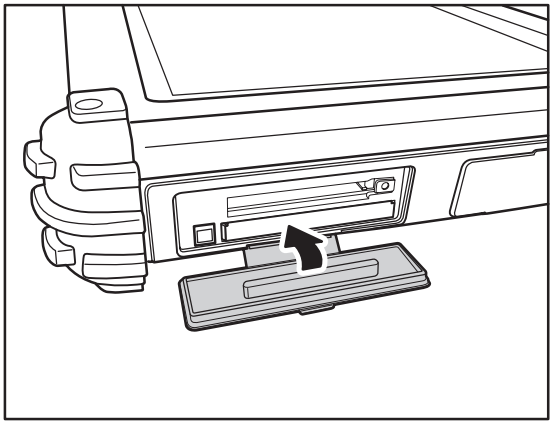
1. Open the memory card compartment cover.



2. Insert the PCMCIA card, until it clicks into place.



3. Close the memory card compartment cover.

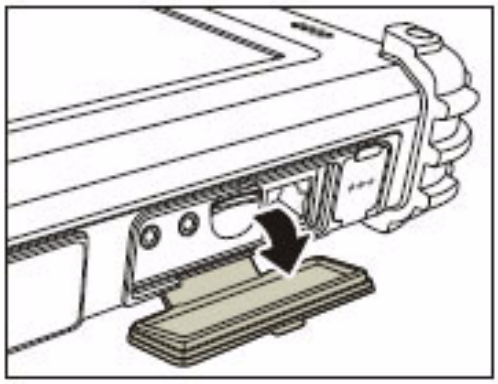


Removing a PCMCIA Card

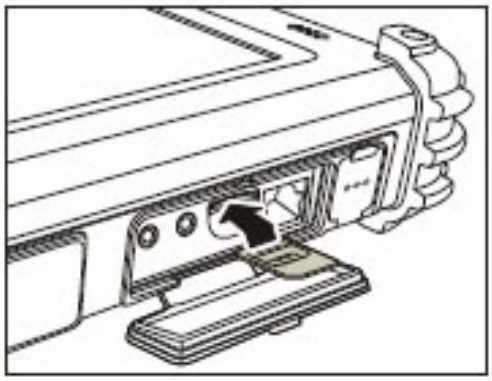
1. Open the memory card compartment cover.
2. Press the PCMCIA card switch inwards until the card pops out.
3. Remove the card.
4. Close the memory card compartment cover.

Inserting 3G SIM Card (optional)

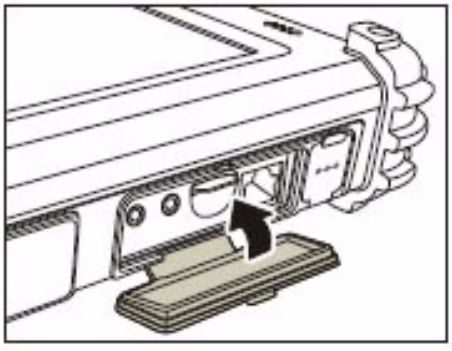
1. Open the left side cover where 3G SIM card slot is located.



2. Make sure the system is off and push the SIM card into the slot with the metallic part facing up and the clipped corner facing outward until it clicks into place.



3. Close the cover.



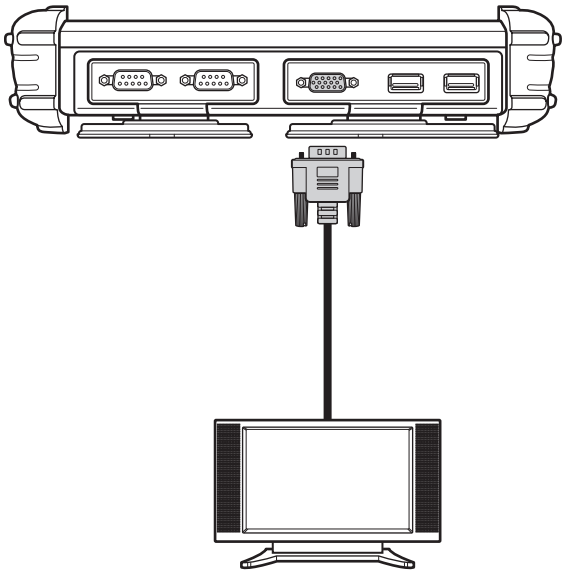
Removing 3G SIM Card (optional)

1. Slightly push the SIM Card inwards to pop it out.

1.5 Making Connections

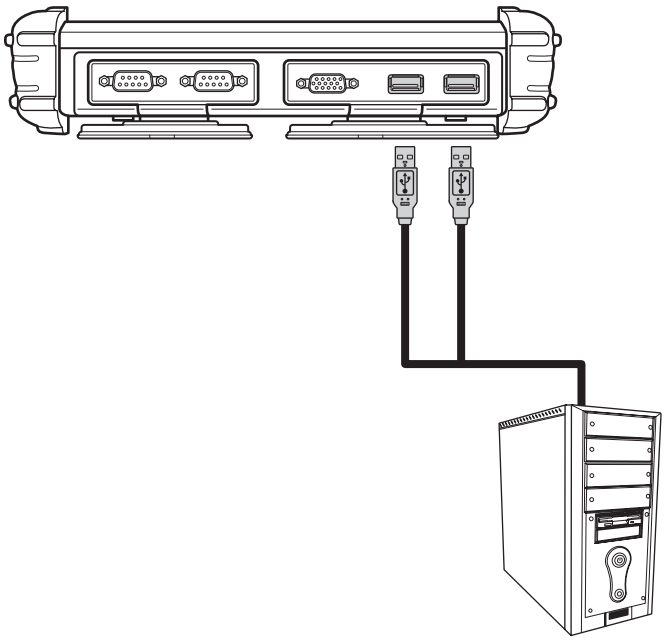
Connecting to a Monitor

You can connect the PWS-8101M to an external monitor for enhanced viewing. Connect one end of a VGA cable to the VGA port on the right side of the PWS-8101M. Connect the other end to the VGA port on the monitor.



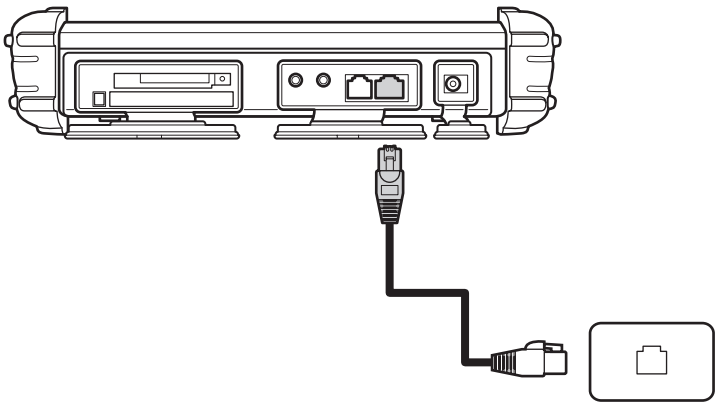
Connecting USB Devices

You can connect peripheral devices, such as a USB keyboard and mouse, as well as other wireless devices using the USB ports on the right side of the PWS-8101M.You can also connect directly to another PC using the USB ports.



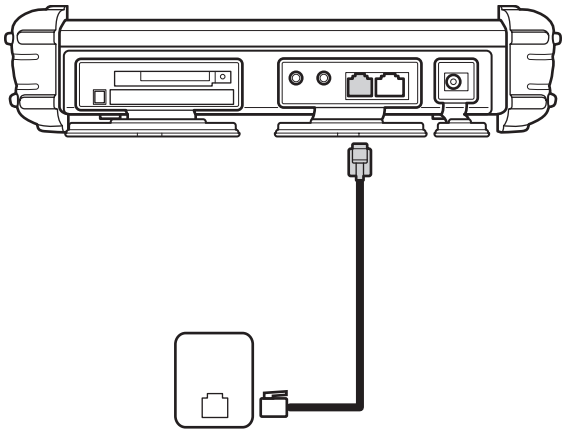
Connection to a Network

You can connect to either a home or work network using the RJ-45 port. Connect one end of the network cable to the RJ-45 port on the left side of the PWS-8101M and the other to your network hub or wall socket.



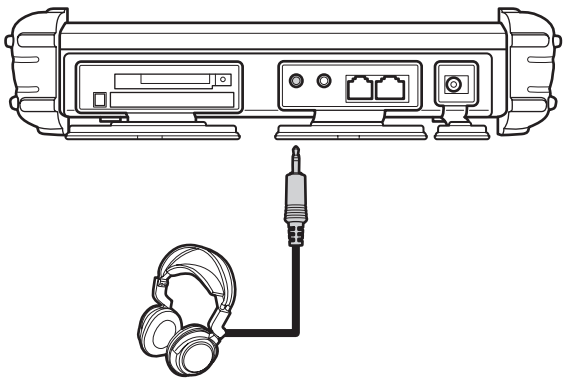
Connecting to a Telephone Line

If you are accessing the Internet via a regular telephone line, you can connect the PWS-8101M using the telephone jack on the left side of the PWS-8101M.



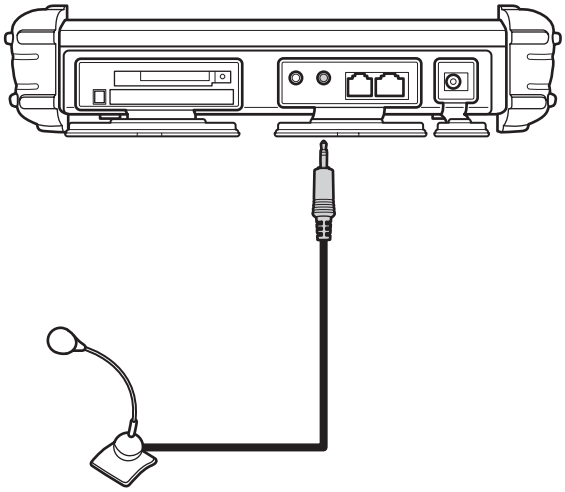
Connecting Headphones

You can connect a pair of headphones using the headphone jack on the left side of the PWS-8101M.



Connecting a Microphone

The PWS-8101M features and in-built microphone, but you can connect an external microphone if needed. Connect the microphone to the microphone jack on the left side of the PWS-8101M as shown.



Turning On

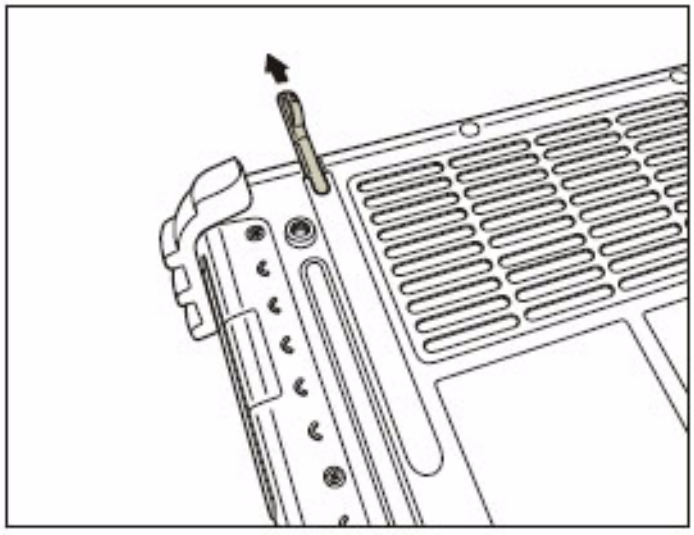
Press and hold the power button to turn on the PWS-8101M.

1.6 Controlling the PWS-8101M

Using the Touchscreen

The PWS-8101M is equipped with touchscreen technology, for ease of use when you are on the go. Simply use the pen to select icons and run applications.

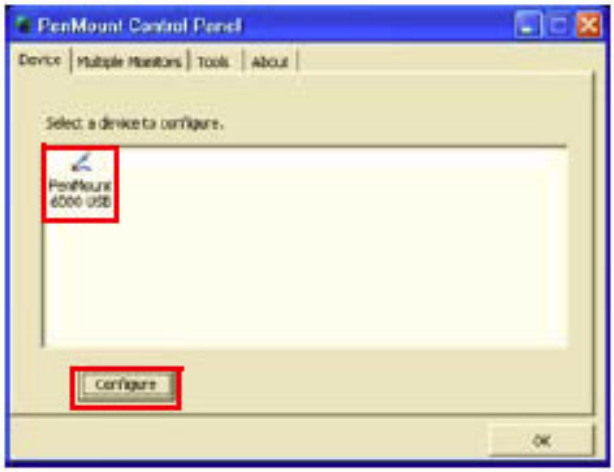
Remove the pen from its holder at the rear of the PWS-8101M and you are ready to go.



Calibrating the Touchscreen

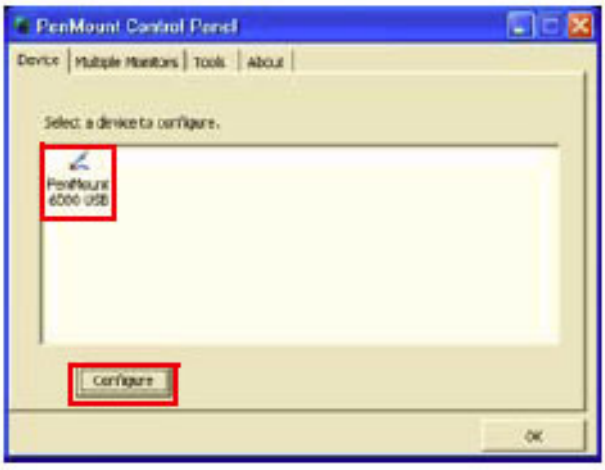
To calibrate the touch screen, tap **Start** > **All Programs** > **PenMount Universal Driver** > **PenMount Control Panel** to open PenMount Control Panel or tap the pointer device icon in the system tray.

1. Turn on the Advanced Calibration in **Tools** > **Advanced Calibration**. From PenMount Control Panel, highlight **PenMount 6000 USB** under the**Device** tab. and tap **Configure.** The Device configuration screen opens.



2. Tap the **Calibrate** tab and you will see two options:

- **Standard Calibration:** select this option to start 5 pointsStandardCalibration.



- **Advanced Calibration:** select this option to use 4, 9, 16, or 25 points to calibrate the screen. Check **Plot calibration data** to enable touch panel linearity comparison graph. The blue lines show linearity before calibration and black lines show linearity after calibration.

3. Touch the points as displayed onscreen using the pen.

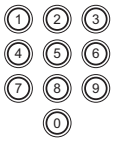
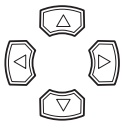
Using the Tap Function

When you tap on the screen with the a pen or stylus, it emulates click functions of a regular mouse.

- To emulate a left click single tap the screen once.
- To emulate a right click tap and hold the screen.
- To emulate a double click tap the screen twice.

Using the Control Panel Buttons

The control panel buttons are located on the right of the touch screen. See below for a description of each button and its function.

Button	Name	Function
	Power	Press to power on and off the PWS-8101M
	Numbers	Press to enter numbers
	Arrows	Press to move up, down, left, right
	Enter	Press to emulate the Enter key
	Tab	Press to emulate the Tab key
	Escape	Press to emulate the ESC key
	Function	Press to access your favorite programs
	Brightness/ Volume Settings	Hold and press the up or down buttons to adjust brightness. Hold and press the left or right buttons to adjust the volume level.
	Keyboard	Press to access the on-screen keyboard

Using the Onscreen Keyboard

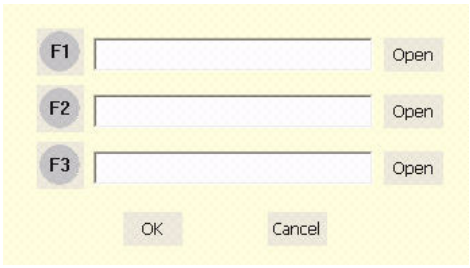
Press the button to bring up the on-screen keyboard.

Use pen to tap and enter letters, numbers and symbols as you would with a regular keyboard. To type capital letters tap the lock icon on the on-screen keyboard.

Configuring the Function Buttons

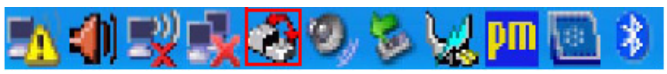
The three function buttons can be configured as shortcuts to access your favorite or frequently used programs.

1. Press the function button to which you want to assign a program shortcut to. The function button screen appears.



2. Tap **Open** and locate the program on the hard drive.
3. Tap **OK** to save all new settings.

Once you have assigned a function to one of the buttons, you can change it at a later date by tapping on the Tray icon in the system tray. Select **Function Key Setting** from the menu and follow the procedure above from step 2 to make any changes.



Adjusting Screen Brightness

1. Press and hold the button.
2. Press the up arrow to increase brightness, or the down to decrease brightness.

Adjusting the Volume

1. Press and hold the button.
2. Press the right arrow to increase the volume, or the left arrow to decrease the volume. You can also adjust the screen brightness through the Tray. Tap the Tray icon in the system tray, and select **Volume Adjustment**. Move the slider to make adjustments.

Chapter 2

Installation

2.1 General Installation

2.1.1 Wireless Connections

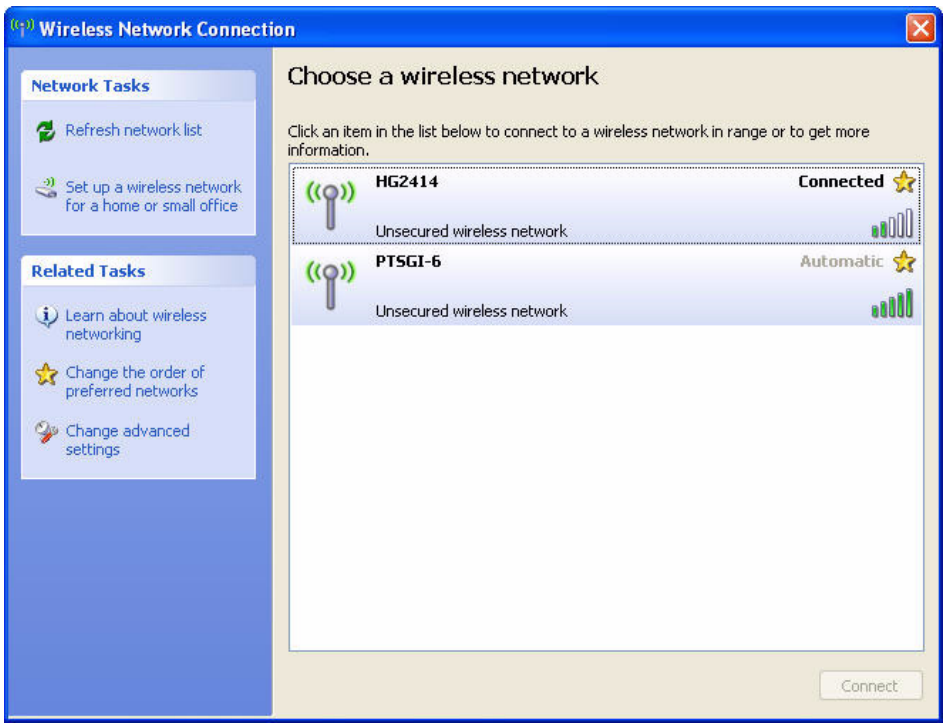
WiFi Connections

Note! *WiFi access requires a separate purchase of a service contract with a wireless service pro- vider. Contact a wireless service provider for more information.*

The PWS-8101M comes pre-loaded with WLAN module, you can send and receive signals to a WiFi network then synchronize files.

A wireless network can be added either when the network is detected or by manually entering settings information. Before doing these steps, determine if authentication information is needed.

1. Right-click the wireless connection icon in the notification area. Select View Available Wireless Networks to open Wireless Connection screen. Select one of the wireless connections and tap Connect.
2. You are prompted to enter a WEP key for secure access. Contact the network administrator for this key.
3. Enter the required WEP key and reenter the key forconfirmation and then tap Connect.
4. The wireless connection is negotiated and you see the following screen.

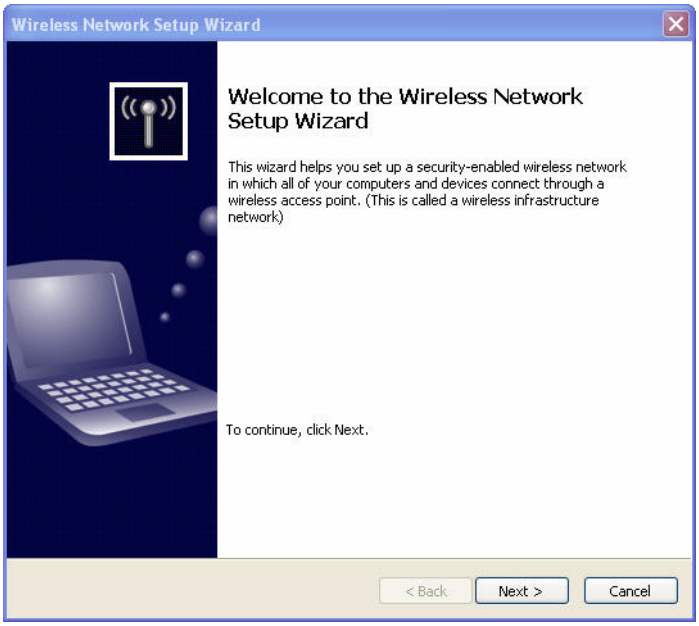

Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
HG2414
Connected
Unsecured wireless network
PTSGI-6
Automatic
Unsecured wireless network
Connect

The wireless connection icon in the notification area shows a connected status whenever a wireless connection is present.

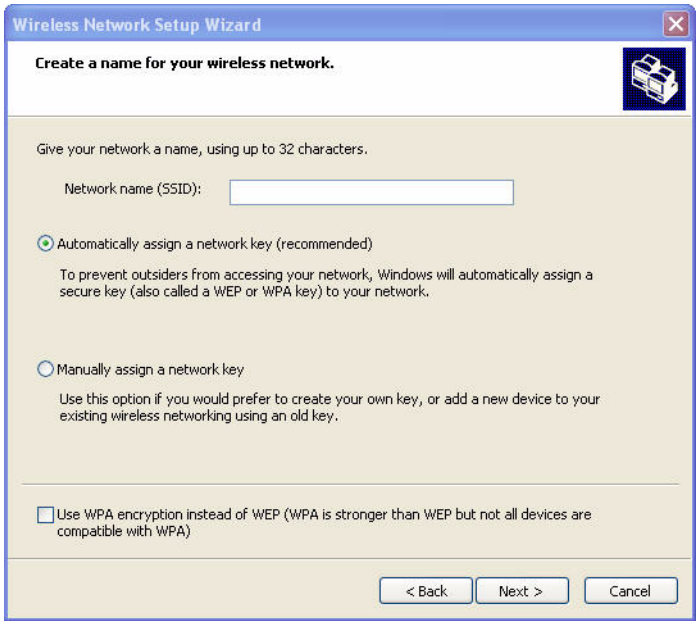
2.1.2 Configuring a New Wireless Network

Should you need to create a new wireless network, do the following:

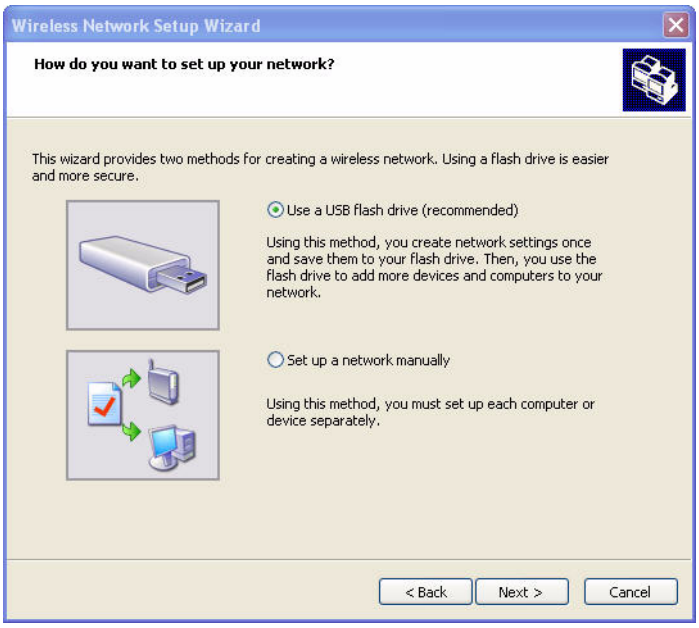
1. Tap the wireless icon in the Windows system tray to open the Wireless Network Connection Status screen.
2. Tap **Set up a wireless network for a home or small office**. The Wireless Network Setup Wizard begins.
3. Tap **Next** to continue setup.


Wireless Network Setup Wizard
Welcome to the Wireless Network Setup Wizard
This wizard helps you set up a security-enabled wireless network in which all of your computers and devices connect through a wireless access point. (This is called a wireless infrastructure network)
To continue, click Next.
< Back
Next >
Cancel

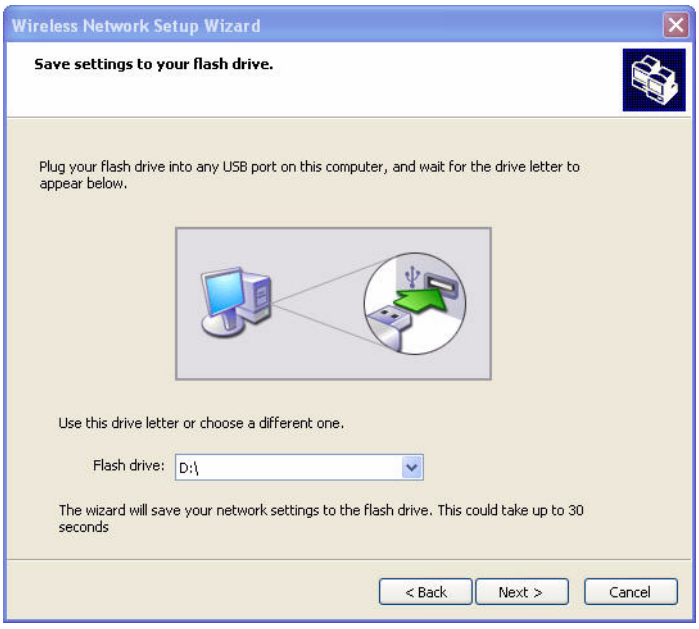
4. Enter the name of your network and select whether to assign a secure network key automatically or manually (we recommend you allow the system to do this automatically).Tap **Next** to continue.


Wireless Network Setup Wizard
Create a name for your wireless network.
Give your network a name, using up to 32 characters.
Network name (SSID):
Automatically assign a network key (recommended)
To prevent outsiders from accessing your network, Windows will automatically assign a secure key (also called a WEP or WPA key) to your network.
Manually assign a network key
Use this option if you would prefer to create your own key, or add a new device to your existing wireless networking using an old key.
Use WPA encryption instead of WEP (WPA is stronger than WEP but not all devices are compatible with WPA)
< Back
Next >
Cancel

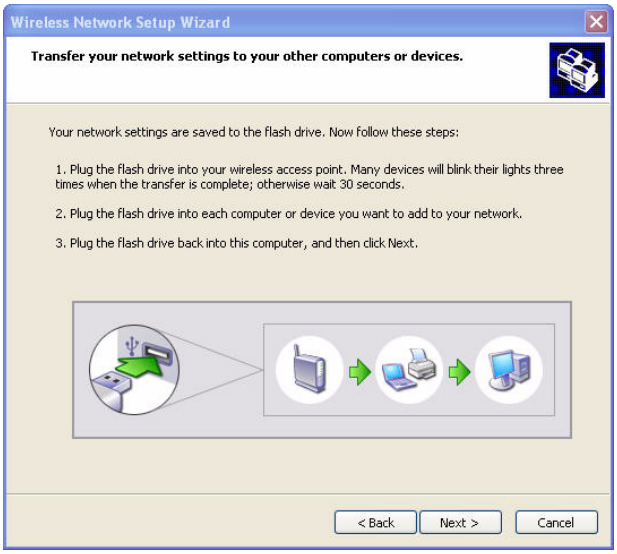
5. Select the method by which you will set up other computers in your network. Choose to use a USB Flash drive to copy and transfer network settings to other computers, or choose to do it manually on each computer in the network (we recommend you use a USB flash drive to transfer settings). Tap **Next** to continue. (Skip to **step 8** if you decide to configure each computer manually.)


Wireless Network Setup Wizard
How do you want to set up your network?
This wizard provides two methods for creating a wireless network. Using a flash drive is easier and more secure.
Use a USB flash drive (recommended)
Using this method, you create network settings once and save them to your flash drive. Then, you use the flash drive to add more devices and computers to your network.
Set up a network manually
Using this method, you must set up each computer or device separately.
< Back
Next >
Cancel

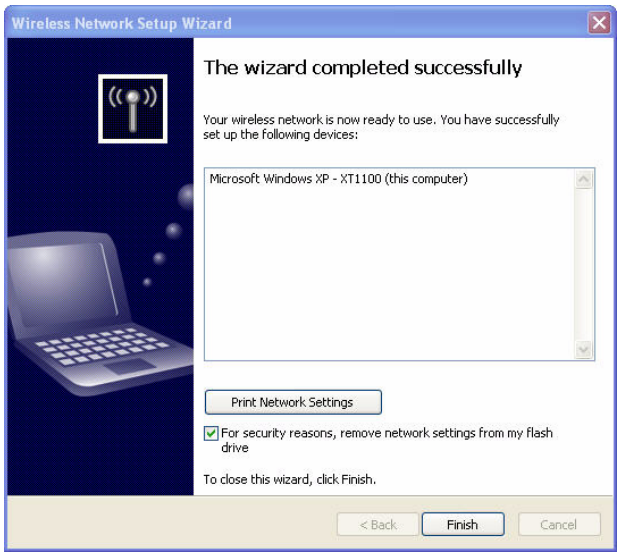
6. Insert your USB flash drive into a free USB slot and select the drive name from the drop-down list. Tap **Next** to continue.


Wireless Network Setup Wizard
Save settings to your flash drive.
Plug your flash drive into any USB port on this computer, and wait for the drive letter to appear below.
Use this drive letter or choose a different one.
Flash drive:
D:\
The wizard will save your network settings to the flash drive. This could take up to 30 seconds
< Back
Next >
Cancel

7. All your current network settings are copied to your USB flash disk. Tap **Next** to continue.


Wireless Network Setup Wizard
Transfer your network settings to your other computers or devices.
Your network settings are saved to the flash drive. Now follow these steps:
1. Plug the flash drive into your wireless access point. Many devices will blink their lights three times when the transfer is complete; otherwise wait 30 seconds.
2. Plug the flash drive into each computer or device you want to add to your network.
3. Plug the flash drive back into this computer, and then click Next.
< Back
Next >
Cancel

8. Setup is complete. Tap **Print Network Settings** to print a list of settings if you are configuring each computer manually. Tap **Finish** to complete the wizard.


Wireless Network Setup Wizard
The wizard completed successfully
Your wireless network is now ready to use. You have successfully set up the following devices:
Microsoft Windows XP - XT1100 (this computer)
Print Network Settings
For security reasons, remove network settings from my flash drive
To close this wizard, click Finish.
< Back
Finish
Cancel

9. If you chose to transfer settings to other computers via your USB flash disk, select Wireless Network Setup Wizard from the prompt that appears when you insert the disk into other computers. The network settings are transferred automatically.

Bluetooth Connections

The PWS-8101M comes with built-in Bluetooth functionality that allows you to connect and communicate with other Bluetooth-enabled devices.

Setting Up Bluetooth

Follow these instructions to set up a Bluetooth connection.

1. Tap **Start** > **Control Panel** and double-tap Bluetooth Device Properties to open the Bluetooth Devices screen.
2. Tap **Add Device** to open the **Add Bluetooth Device Wizard**.

3. Select the My device is set up and ready to be found checkbox and tap **Next**.
4. The Wizard searches for and displays other Bluetooth devices within range.

5. Tap the device to connect to and tap **Next**. You are prompted for a passkey.
6. Select your option and tap **Next**.
7. The Wizard attempts to connect with the other device and prompts the other device to input the passkey. If the other device has successfully accepted the passkey, the devices are connected and the Wizard finishes.

It is recommended that you use a passkey to prevent unauthorized access to your PWS-8101M.

GPRS Connection (optional)

GPRS function is optional with PWS-8101M. It allows you to make 3G connection to the internet. See “Inserting 3G SIM Card (optional)” on page 17 for installation instruction. Tap **Start** > **All Programs** > **Sierra Wireless** > **3G Watcher** > **3G Watcher** to run the 3G software.

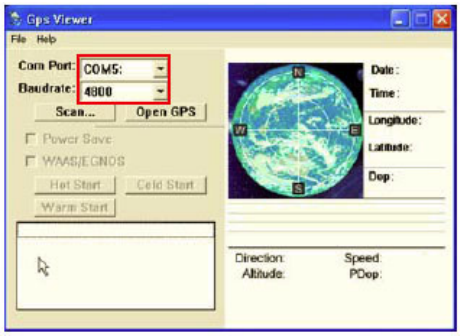
1. Enter your pin if prompted.
2. Tap the **Connect** button to connect.
3. 3G connection established. You can now connect to the internet.

To avoid damage to the SIM card, insert the SIM card before you turn the power on and remove the SIM card after you turn the power off.

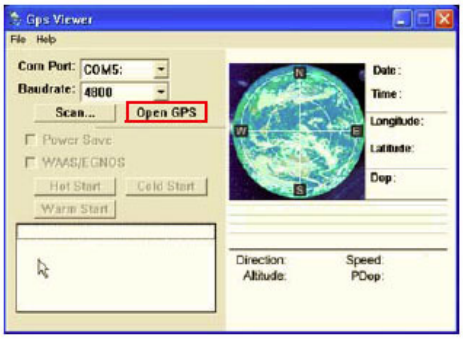
GPS Connection (optional)

GPS function comes optional with PWS-8101M. It allows you to view your GPS positions. Different countries have different GPS positioning programs. You can download any GPS positioning program from website and install into this unit. The following illustration demonstrates how the GPS viewer operates. It is only an example.

1. From the Com Port drop down menu tap **COM5** to select COM5 as your com port.
2. From the Baudrate drop down menu tap **4800** to select 4800 as your baudrate.



3. Tap **Open GPS** to start GPS.



4. When satellites are detected, their positions are shown on the map.

Chapter 3

Operating the LCD Display

3.1 OSD User Controls

3.1.1 Advanced Settings

Configuring Touchscreen Function

Tap the pointer device icon in the system tray then select the **Tools** tab > or tap **Start** > **All Programs** > **PenMount Universal Driver** > **PenMount Control Panel** to access PenMount Control Panel.

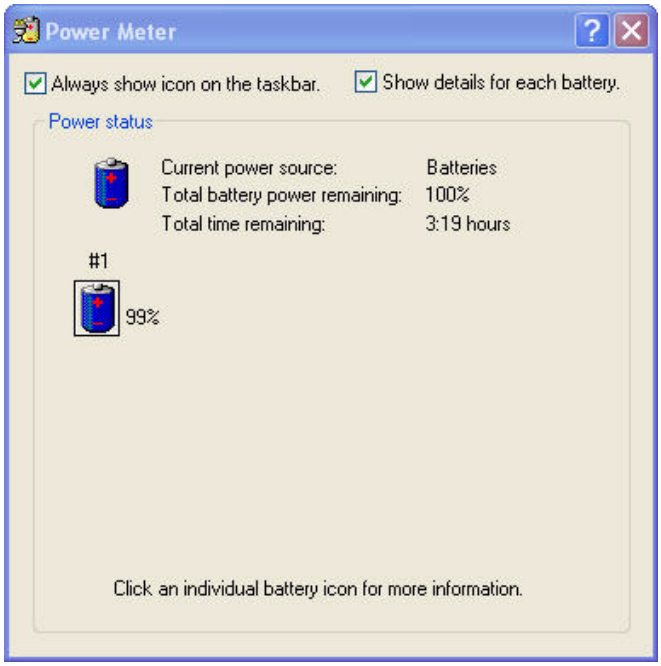
Tap the tabs at the top of the screen to access the settings screens. The contents in each tab page may vary based upon the version of the operating system you are using.

Checking Battery Status

As it is likely you will be using your PWS-8101M when out and about, it is important that you monitor the battery status regularly, to ensure you do not run out of power at a critical moment.

Double tap on the battery icon in the system tray to view detailed information.

The battery screen appears:



Tap on the battery icon for more detailed information.

Power Options

You can configure specific power options to best suit your needs and to get the most out of your battery. Tap on the battery icon

in the system tray to view the **power options** menu. See below for a description of the settings for each power option.

	Monitor turns off after	Hard disks turn off after	System goes into standby mode after
Home/Office Desk	5 minutes	10 minutes	5 minutes
Portable/ Laptop	5 minutes	5 minutes	5 minutes
Presentation	Never	5 minutes	15 minutes
Always On	15 minutes	30 minutes	Never
Minimal Power Management	5 minutes	15 minutes	5 minutes
Max Battery	1 minute	3 minutes	2 minutes

You can also access further power options through the Control Panel. Click **Start** >**Control Panel** > **Power Options**.

3.2 Maintenance

3.2.1 Maintaining the Battery

- Do not expose heat or attempt to disassemble the battery, and do not place the battery in water or in a fire.
- Do not subject the battery to strong impact, such as a blow from a hammer, or stepping on or dropping it.
- Do not puncture or disassemble the battery.
- Do not attempt to open or service the battery.
- Replace only with batteries designed specifically for this product.
- Keep the battery out of reach of children.
- Dispose of used batteries according to local regulations.

3.2.2 Maintaining the LCD Display

- Do not scratch the surface of the screen with any hard objects.
- Do not spray liquid directly on the screen or allow excess liquid to drip down inside the device.
- Do not place anything, such as food and drink, on the screen at any time to prevent damage to the screen.
- Clean the LCD display only with a soft cloth dampened with denatured alcohol or a proprietary LCD screen cleaner.

3.2.3 Cleaning the PWS-8101M

1. Turn off the PWS-8101M and unplug the power cord.
2. Wipe the screen and exterior with a soft, damp cloth moistened only with water. Do not use liquid or aerosol cleaners on the screen, as these will discolor the finish and damage the screen.

Appendix A

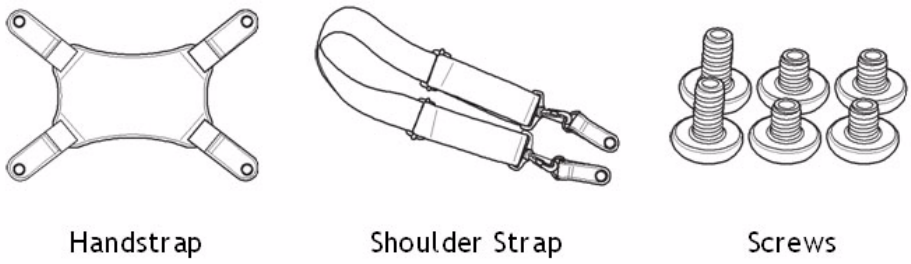
Accessories

A.1 Accessories

The following accessories are available upon request. Please contact the related sales teams for support.

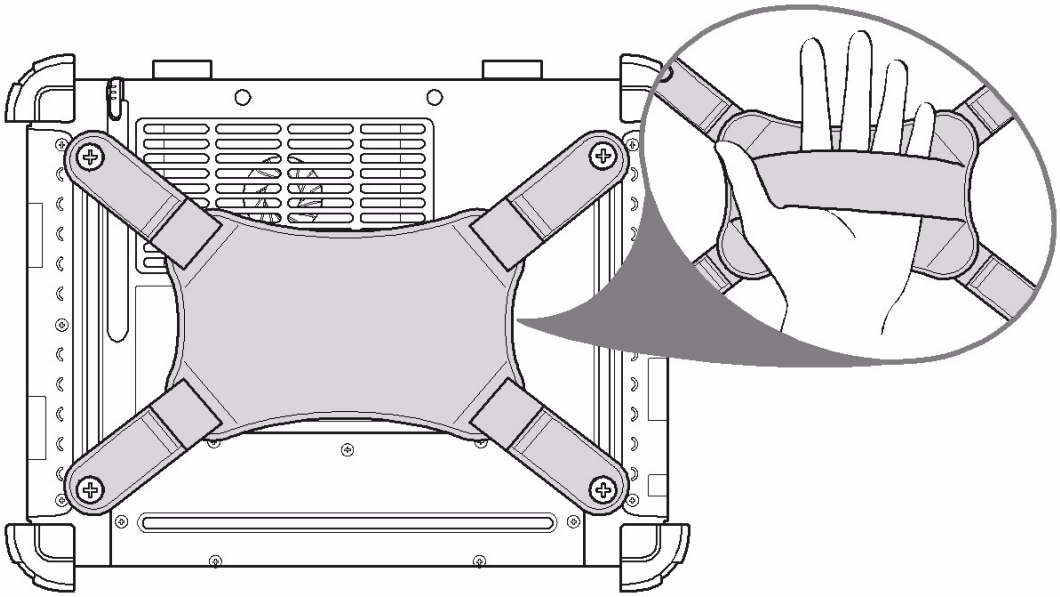
Handstrap and Shoulder Strap

A detachable handstrap and shoulder strap are provided to carry your Tablet PC securely and safely. You can use the supplied handstrap and shoulder strap separately or together to carry the PWS-8101M when you are outside your home or office.

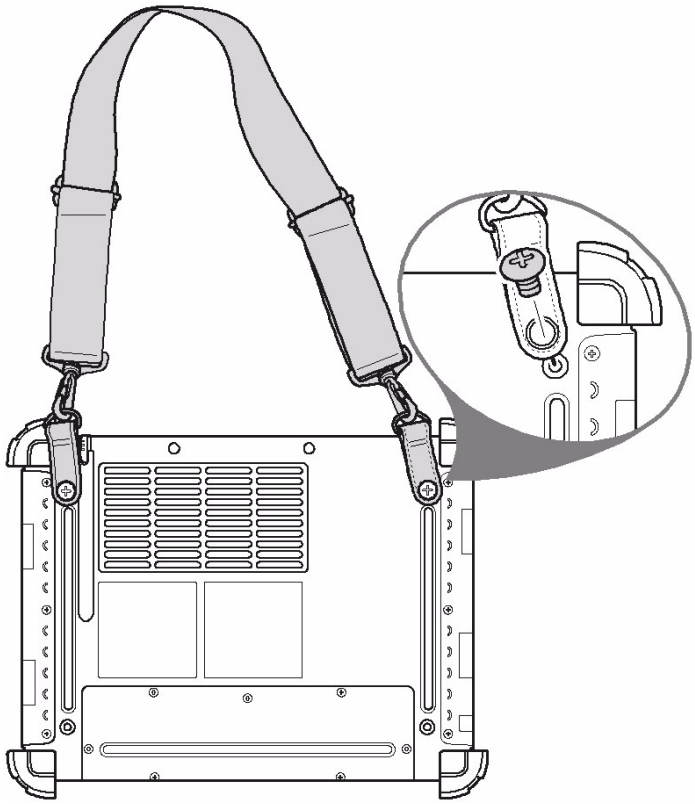


When using the handstrap and shoulder strap separately:

- Attach the handstrap to the rear of your tablet PC using the four short screws as shown. The handstrap makes it easy to carry the device in one hand.

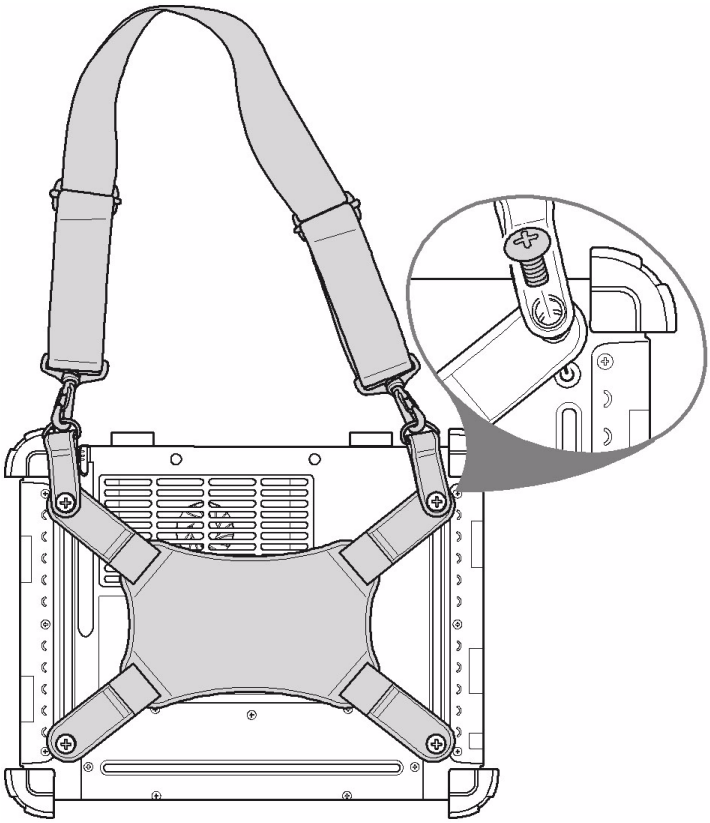


- Attach the shoulder strap to the rear of your tablet PC using the two short screws.



When using the handstrap and shoulder strap together:

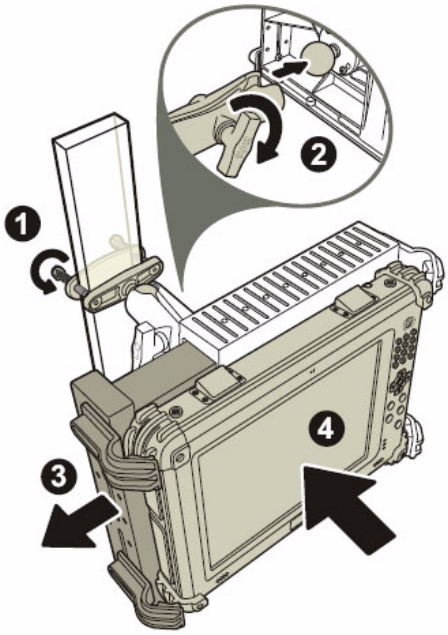
- Attach the handstrap and shoulder bag to the rear of your tablet PC using four screws as shown. (Two long screws to the upper screw holes, and two short screws to the lower screwholes.)



Vehicle Mount

Use the vehicle mount to mount the tablet PC to a vehicle bumper.

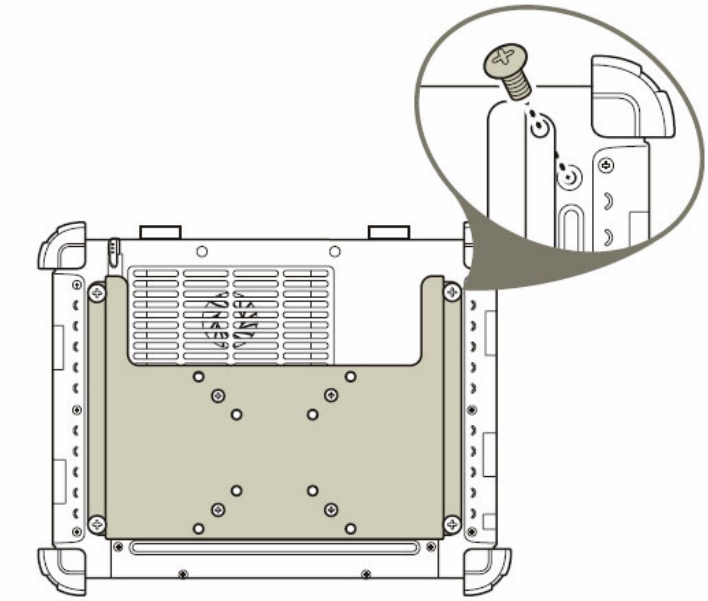
1. Attach the rail bolt to the bumper as shown and use a wrench to tighten each nut alternately.
2. Loosen the double socket arm by turning the knob counter clockwise and attach it to the ball base of the tray. Turn knob clockwise to tighten the double socket arm when the ball base is all the way inside.
3. Adjust the retaining side arms by moving them to the maximum length and pull to extend the tray.
4. Place the tablet PC on the tray with the retaining side arms clipped securely to the four rubber bumpers of the tablet PC.



Vesa Mount

Vesa mount can be used with a variety of alternate mounting solutions..

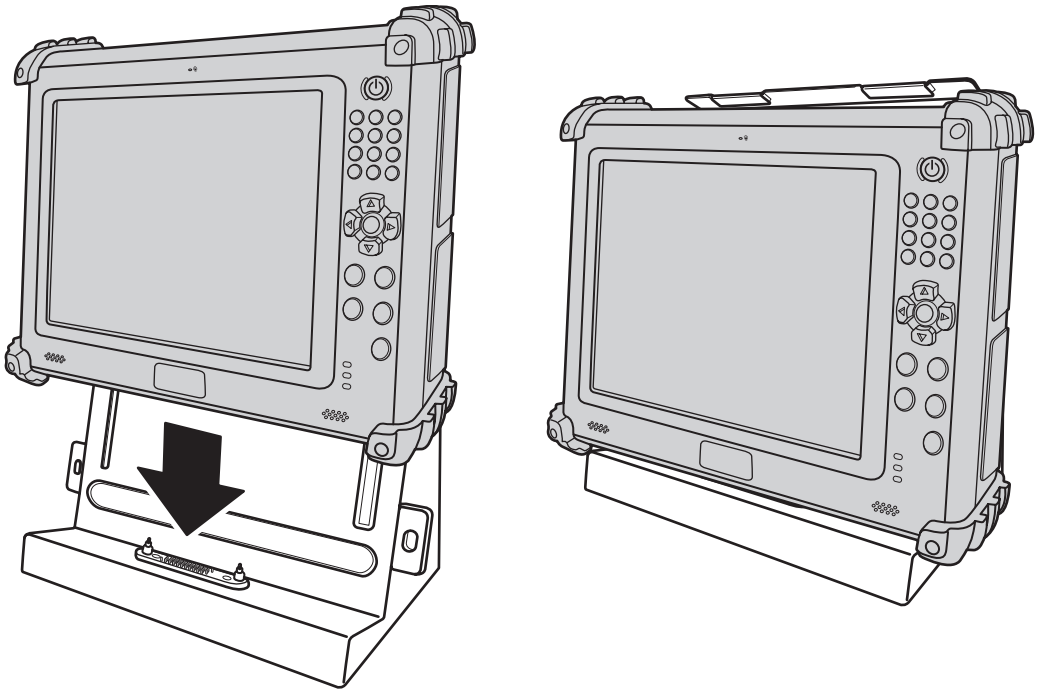
- Install the vesa mount by screwing on the screws as shown.



Tablet PC Docking

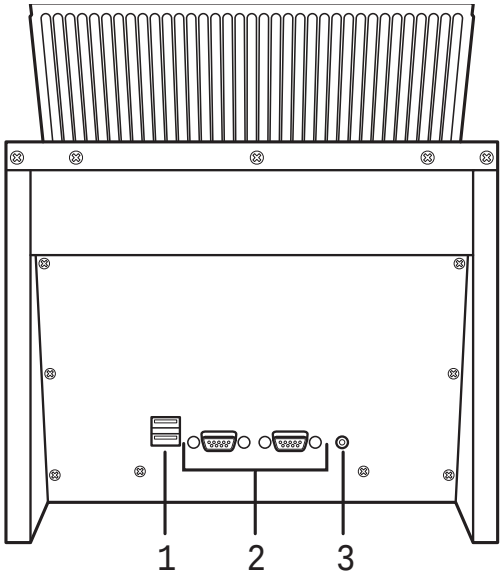
You can use the supplied PC docking stand to dock the tablet PC when you are at your home or office desk. When docked, you can charge power to and transfer data from your tablet PC to another PC.

Attach the PWS-8101M to the PC docking stand as shown.



Docking Views

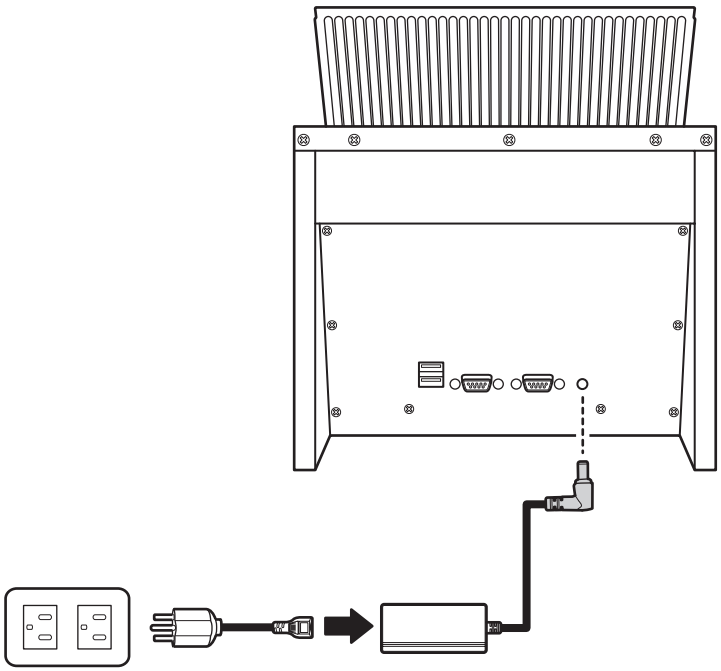
See below for a description of all ports and connectors.



1	USB Ports	Connect USB connectors to these ports.
2	Serial Ports	Connect serial cables to these ports.
3	DC-IN	Connect the AC adapter to this port.

Connecting Power to the Docking

Connect the AC power adapter to the docking and the mains as shown below.



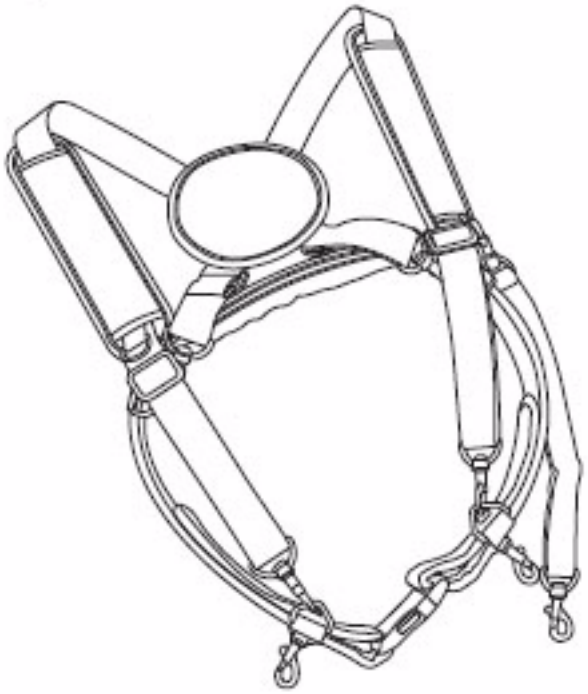
Desk Docking Specifications

Feature	Description
Product Name	PWS-8101M Tablet PC Docking
Model Number	By request
External I/O Interfaces	Two USB 2.0 host connectors (Or Factory Option: Four USB) Two RS-232/422/485 (Or Factory Option:extra two RS232) One DC-in
Power Adapter	Universal AC 90V ~ 265V, 47~63Hz input; 19V, 3.16A output
Physical Size	230 x 154 x 252 mm
Environment	Operating Temperature -20 ~ 60° C Storage Temperature -40 ~ 70° C Operating Humidity 10% ~ 95%
Rugged Specifications	Waterproof at front bezel
Certifications	CE, FCC, UL, TUV, CCC

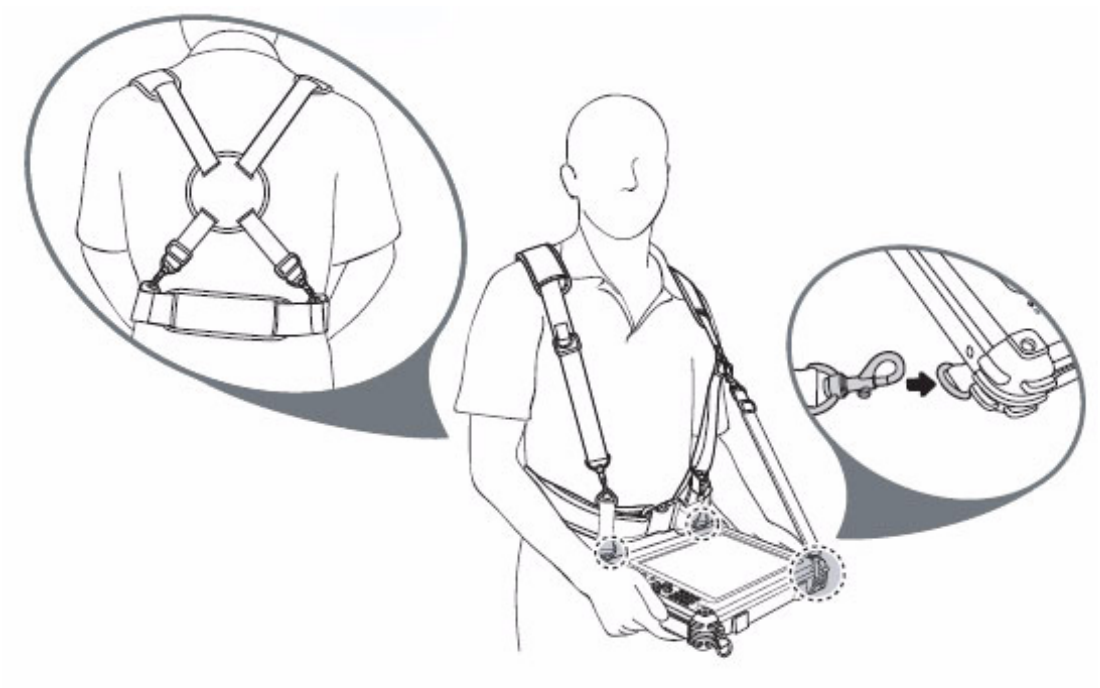
Tablet PC Holster

Tablet PC holster can attach directly to tablet PC. It enables you to work freely with both hands while distributing the weight of the tablet PC throughout the upper torso.

1. Loosen the shoulder straps, put your arms through the shoulder straps.



2. Snap shut the waist belt.
3. Tighten the shoulder straps and the belt.
4. Attach the 3 points of tablet PC to the holster as shown.



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